Mr. Robert Martin
Lear Corporation, Shenandoah Division
500 N. Fillmore Rd.
Greencastle, IN 46135

Re: 133-11325
First Significant Source Modification to
Part 70 No.: T 133-5803-00018

Dear Mr. Martin.:

Lear Corp., Shenandoah Division was issued a permit on May 26, 1998 for manufacturing of injection molded plastic parts for use in automobile interiors. An application to modify the source was received on September 7, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

(a) Two (2) front door bolster/glue booths, identified as Bolster/Glue Booths 23 and 24, equipped with air atomization spray applicators; dry filters for overspray control exhausting to stacks 23 and 24; and infrared curing ovens. The maximum capacity of each of the bolster/glue booths is 15 interior automotive plastic parts per hour.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The proposed operating conditions applicable to these emission units are attached to this Source Modification approval. These proposed operating conditions shall be incorporated into the Part 70 operating permit as an administrative amendment in accordance with 326 IAC 2-7-10.5(l)(1) and 326 IAC 2-7-11.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Janusz Johnson, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for extension (2-8325), or dial (317) 232-8325.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments: Draft modified Part 70 pages (2 pages)
JKJ
cc: File - Putnam County
U.S. EPA, Region V
Putnam County Health Department
Air Compliance Section Inspector - Marc Goldman
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

SECTION D.7 FACILITY OPERATION CONDITIONS

(5)	Two (2) front door bolster/glue booths, identified as Bolster/Glue Booths 23 and 24, equipped with air atomization spray applicators; dry filters for overspray control exhausting to stacks 23 and 24; and infrared curing ovens. The maximum capacity of each of the bolster/glue booths is 15 interior automotive plastic parts per hour.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Best Available Control Technology (BACT) [326 IAC 8-1-6]

Any change or modification which may increase the potential VOC emissions to 25 tons per year or more from Bolster/Glue Booths 23 and 24 must be approved by the Office of Air Management (OAM) before such change may occur. The input VOC to the bolster/glue booths is less than 25 tons per year, therefore, 326 IAC 8-1-6 (BACT) does not apply.

D.7.2 Prevention of Significant Deterioration (PSD)

Any change or modification which may increase the potential VOC emissions to 40 tons per year or more from Bolster/Glue Booths 23 and 24; Glue Booths 17 and 19; and Bolster Wraps 18, 20, 21, and 22 must be approved by the Office of Air Management (OAM) before such change may occur. The input VOC to these emission units combined is less than 40 tons per year, therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21 do not apply.

D.7.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the Bolster/Glue Booths 23 and 24 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.7.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Bolster/Glue Booths 23 and 24 and any control devices.

Compliance Determination Requirements

D.7.5 Testing Requirements [326 IAC 2-7-6(1)]

Testing of this facility is not specifically required by this permit. However, this does not preclude testing requirements on this facility under 326 IAC 2-1-4(f) and 326 IAC 2-7-6(1).

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.6 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when Bolster/Glue Booths 23 and 24 are in operation.

D.7.7 Monitoring

(a) Daily inspections shall be performed at Bolster/Glue Booths 23 and 24 to verify the

placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plans.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.8 Record Keeping Requirements

(a) To document compliance with Conditions D.7.1 and D.7.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.7.1 and D.7.2.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The cleanup solvent usage for each month;

(4) The total VOC usage for each month; and

(5) The weight of VOCs emitted for each compliance period.

(b) To document compliance with Conditions D.7.6 and D.7.7, the Permittee shall maintain a log of weekly overspray observations, daily, weekly and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	**Lear Corporation, Shenandoah Division**
Source Location:	**500 North Fillmore Road, Greencastle, Indiana 46135**
County:	**Putnam**
SIC Code:	**3089**
Operation Permit No.:	**T 133-5083-00018**
Operation Permit Issuance Date:	**May 26,1998**
Source Modification No.:	**133-11325-00018**
Permit Reviewer:	**Janusz Johnson**

The Office of Air Management (OAM) has reviewed a modification application from Lear Corporation relating to the construction of the following emission units and pollution control devices:

(a) Two (2) front door bolster/glue booths, identified as Bolster/Glue Booths 23 and 24, equipped with air atomization spray applicators; dry filters for overspray control exhausting to stacks 23 and 24; and infrared curing ovens. The maximum capacity of each of the bolster/glue booths is 15 interior automotive plastic parts per hour.

History

On July 21, 1999, Lear Corporation, Shenandoah Division submitted an application to the OAM requesting to add six (6) glue and bolster wrap booths to their existing plant. Lear Corporation, Shenandoah Division was issued a Minor Source Modification (133-11168-00018) on August 10, 1999, for these booths.

On August 23, 1999, Lear Corporation, Shenandoah Division submitted an application to the OAM requesting to relax some of the monitoring conditions for their glue booths and update the equipment descriptions at their existing plant. Part of the equipment updates was the removal of the Ranger paint application line consisting of two (2) paint booths, a separate touch-up paint hood, and six (6) previously permitted glue booths. Lear Corporation, Shenandoah Division has a Significant Permit Modification (133-11265-00018) pending for these changes.

On September 7, 1999, Lear Corporation, Shenandoah Division submitted an application to the OAM requesting to add the two (2) new bolster/glue booths listed above. Subsequently an additional application for two (2) bolster wrap machines was submitted on October 27, 1999 (133-11495-00018). The applications were combined for review under 133-11495; however, based on information received in a phone conversation with Lear Corp. on December 9, 1999, the application for the two (2) bolster wrap machines has been withdrawn. Therefore, the application for the two (2) bolster/glue booths will be processed under 133-11325-00018 as originally received.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
23	bolster/glue Booth No. 23	36	2	8000	70
24	bolster/glue Booth No. 24	36	2	8000	70

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 7, 1999, with additional information submitted on November 24 and December 9, 1999.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (1 page).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls for the two (2) new bolster/glue booths. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	1.3
PM-10	1.3
SO_2	0.0
VOC	20.0
CO	0.0
NO_x	0.0

HAP's	Potential To Emit (tons/year)
methanol	1.0
hexane	4.0
toluene	3.0
vinyl acetate	4.0
TOTAL	12.0

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. The potential to emit (PTE) from the previous Minor Source Modification (133-11168-00018, issued on August 10, 1999) has been added to the PTE of the new emission units listed herein because of the proximity of receipt of the applications. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4) because the potential to emit volatile organic compounds (VOC) from the combined modifications is greater than 25 tons per year.

County Attainment Status

The source is located in Putnam County.

Pollutant	Status
PM-10	Attainment
SO_2	Attainment
NO_2	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Putnam County has been designated as attainment or unclassifiable for ozone.

(b) Putnam County has been classified as attainment or unclassifiable for all other regulated air pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	0.0
PM-10	0.0
SO_2	0.0
VOC	302.8
CO	0.0
NOx	0.0

(a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

(b) These emissions are based upon Airs Facility Quick Look Report, updated January 22, 1999.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification. This table includes the emission units permitted under Minor Source Modification 133-11168-00018 and the equipment covered by this review because the OAM considers the two application requests to be the same project under PSD due to the time frame in which they were submitted and the related nature of the emission units as defined in available USEPA guidance on the subject.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Bolster/glue Booths 23 and 24	1.3	1.3	0.0	20.0	0.0	0.0	12.0
Glue Booths 17 and 19, Bolster Wraps 18, 20, 21 and 22 (approved under 133-11168)	0.2	0.2	0.0	18.6	0.0	0.0	13.8
Combined project PTE	1.5	1.5	0.0	38.6	0.0	0.0	25.8
PSD Significant Thresholds	25	15	40	40	100	40	NA

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The dry filters shall be in operation at all times the bolster/glue booths are in operation to comply with this limit.

326 IAC 8-1-6 (BACT)

The potential to emit (PTE) of volatile organic compounds (VOCs) from the bolster/glue booths is less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply to these facilities.

There are no other 326 IAC 8 rules applicable to these glue booths because the automotive parts being glued (coated) are made out of plastic.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

1. The bolster/glue booths 23 and 24 have applicable compliance monitoring conditions as specified below:

   (a) Daily inspections to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray while one or more of the booths are in operation.

   (b) Weekly inspections of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground.

   These monitoring conditions are necessary ensure compliance with 326 IAC 6-3-2 (Process Operations).

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 **Significant Source Modification No. 133-11325-00018**.

TSD Appendix A: Emission Calculations

Source Name: Lear Corporation, Shenandoah Division
Source Location: 500 North Fillmore Road, Greencastle, Indiana 46135
Source Modification No.: 133-11325-00018
Permit Reviewer: Janusz Johnson

Air Emissions: MMA Bolsters /Glue Booths

PTE VOC Emissions

Adhesive ID	VOC	density	VOC
	wt. fraction	lbs/gal	lbs/gal
Penguin 379	0.8	7.17	5.736

Emission Unit	Max Prod.	Glue	Glue	VOC	VOC	VOC PTE
ID	Parts/hr	oz/pt	gals/pt	lbs/pt	lbs/hr	TPY
EU 23	15	3.4	0.027	0.1524	2.29	10.01
EU 24	15	3.4	0.027	0.1524	2.29	10.01
Total					4.57	**20.0**

PTE HAPS

Adhesive HAPs	wt. %	lbs/gal
Methanol	5	0.2868
Hexane	20	1.1472
Toluene	15	0.8604
Vinyl Acetate	20	1.1472

Emission Unit	Max Prod.	Glue	Methanol	Methanol	Hexane	Hexane	Toluene	Toluene	V- acetate	V-Acetate
ID	Parts/hr	gals/pt	lbs/hr	TPY	lbs/hr	TPY	lbs/hr	TPY	lbs/hr	TPY
EU 23	15	0.027	0.11	0.5	0.46	2.0	0.343	1.5	0.46	2.0
EU 24	15	0.027	0.11	0.5	0.46	2.0	0.343	1.5	0.46	2.0
Total			0.23	**1.0**	0.91	**4.0**	0.69	**3.0**	0.91	**4.0**

PTE PM/PM10 Emissions

Adhesive	density	Solids	Solids	Transfer Eff	Control Eff.
	lbs/gal	wt. fract.	lbs/gal	%	%
Penguin 379	7.17	0.2	1.43	50	95

Emission Unit	Max Prod.	Glue	PM	PM(U)	PM(U)	PM(C)	PM(C)
ID	Parts/hr	gals/pt	lbs/pt	lbs/hr	TPY	lbs/hr	TPY)
EU17	15	0.027	0.0190	0.29	1.25	0.01	0.06
EU18	15	0.027	0.0190	0.29	1.25	0.01	0.06
Total				0.57	**2.5**	0.03	**0.1**